Please note that this draft proposed regulation is for preliminary review by the public as ARB considers revisions based on stakeholder comments and additional data.

REGULATION FOR MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL REFRIGERANTS

Adopt new Subchapter 10, Article ¥ 4, sections 95380 XXXX to 95388 XXXX, title 17, California

Code of Regulations, to read as follows:

Subarticle Article X 5: MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL GWP REFRIGERANTS

Potential Major Changes Still Under Consideration

§ 95383. General Requirements for Stationary Refrigeration and Air-Conditioning and Refrigeration System Registration, Leak Repair, and Reporting

• Revising due date of registration for operation and annual reporting for air-conditioning systems with a refrigerant charge 200 pounds or greater to after fiscal year 2014

Adding: § 95389. Technician Certification

Adding a regulatory or voluntary framework to ensure that certified technicians
installing, maintaining, servicing, repairing, modifying, or disposing of refrigeration or
air-conditioning appliances be certified by a technician certification program approved by
the U.S. EPA or by the Executive Officer designed to train certified technicians to adhere
to best management practices for refrigerant management.

§ 9XXX0 95380. Purpose

The purpose of this regulation is to reduce emissions of refrigerants with high global warming potential from stationary refrigeration and air-conditioning systems by requiring persons subject to this rule to reclaim, recover, or recycle refrigerant; and to properly repair refrigeration and air-conditioning equipment or to replace old equipment with new equipment.

§ 9XXX1 95381. Applicability

This rule is applicable to a person who owns or operates a stationary refrigeration or air-conditioning system, as defined in this rule. This rule is also applicable to a person who installs, repairs, maintains, services, replaces, recycles, or disposes of a stationary refrigeration or air-DRAFT – DO NOT CITE OR QUOTE

conditioning system, and to any person who sells refrigerant refrigerants with high global warming potential.

§ 9XXX2 95382. Definitions

- (a) For the purposes of this <u>sub</u>article, the following definitions shall apply:
- (1) "Additional Refrigerant Charge" means the quantity, in pounds, of refrigerant added to a refrigeration or air-conditioning system in order to bring the system to a full charge and replace refrigerant which has leaked. Additional refrigerant charge does not include an initial refrigerant charge.
- (2) "AHRI" means the Air-Conditioning, Heating and Refrigeration Institute.
- (2 3) "Air-conditioning System" means any stationary, non-residential equipment with a single refrigerant circuit that holds 50 pounds or more than 50 pounds of any combination of high-GWP refrigerant that is intended or installed for the purpose of providing cooling in order to control heat or humidity in facilities solely for the purpose of comfort for persons within a facility. including, but not limited to, warehouses, commercial buildings, institutions, and computer rooms.
- (3 <u>4</u>) "Air District" means an Air Quality Management District or Air Pollution Control District created or continued in existence under Health and Safety Code sections 40000-41357.
- (4 <u>5</u>) "Air Pollution Control Officer" or "APCO" means the appointed head of an Air Quality Management District or Air Pollution District whose appointment and duties are set forth in Health and Safety Code sections 40750-40753.

- (5) "AHRI" means the Air-Conditioning, Heating and Refrigeration Institute.
- (6) "Appliance" means any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, freezer, or refrigeration or air-conditioning system.
- (6 7) "ASHRAE" means the American Society of Heating, Refrigerating and Air-Conditioning Engineers.
- (7 8) "Audit" means an inspection of a refrigeration or air-conditioning system containing refrigerants conducted to:
 - (A) Identify leaks pursuant to a Section 95383 XXX3(a), and
 - (B) Ensure proper operation pursuant to manufacturer's instructions/specifications.
- (8 <u>9</u>) "Automatic Leak Detection System" means a calibrated mechanical, electrical, or electronic device using continuous monitoring for detecting leakage of refrigerants that on detection, alerts the operator, and may be either:
 - (A) A direct system that automatically detects the presence of refrigerant leaked from a refrigeration or air-conditioning system; or
 - (B) An indirect system that automatically interprets measurements (e.g. temperature or pressure) within a refrigeration or air-conditioning system that indicate a refrigerant leak (e.g., in refrigerated cases and other locations in the system.) and alerts the operator to the presence of refrigerant leaks.

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(9 10) "Certified Reclaimer" means a person who <u>is a certified reclaimer holds a current, valid, and applicable reclaimer certificate issued by the U.S. EPA in accordance with Part 82 of Title DRAFT – DO NOT CITE OR QUOTE</u>

40 of the Code of Federal Regulations Title 40 of the Code of Federal Regulations, Part 82, \$82.164.

(40 11) "Certified Refrigerant Recovery or Recycling Equipment" means any refrigerant recovery or recycling equipment that meets the standards of Title 40 of the Code of Federal Regulation, Part 82, §82.158(c), (e), or (g); equipment certified by an approved equipment testing organization to meet the standards in §82.158(b), (d), or (f); or equipment certified pursuant to §82.36(a).

(11 12) "Certified Technician" means a person who holds a current, valid, and applicable certificate issued by the U.S. EPA pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.40 or §82.161. in accordance with Title 40 of the Code of Federal Regulations, Part 82, Subpart B (Standards for Motor Vehicle Service) or Subpart F (Standards for Stationary AC/Refrigerant Service).

(12 13) "Chlorofluorocarbon" or "CFC" means a class of compounds <u>primarily used as</u> refrigerants, consisting of <u>only</u> chlorine, fluorine, and carbon.

(43 14) "Comfort Cooling" means air-conditioning that is intended to provide cooling in order to control heat or humidity in facilities, including, but not limited to, warehouses, commercial buildings, institutions, and computer rooms.

(14 15) "Component" means a part of a refrigeration or air-conditioning system including, but is not limited to, compressor, condenser, evaporator, receiver, and all of its connections and subassemblies, without which the appliance will not properly function or will be subject to failures.

- (45 16) "Continuous Monitoring" means measuring the ambient concentration of refrigerant using electronic or mechanical sensors in real time.
- (17) "Direct emissions" means greenhouse gas emissions from applicable greenhouse gas emitting refrigeration and air-conditioning systems that are under the operational control of a facility owner or operator. Direct emissions are equal to the total additional refrigerant charge minus the total refrigerant recovered from a refrigeration or air-conditioning system.
- (16 18) "Executive Officer" means the Executive Officer of the California Air Resources Board, or his or her delegate.
- (19) "Existing Stationary Refrigeration or Air-conditioning System" means a stationary refrigeration or air-conditioning system installed in a facility prior to July 1, 2010.
- (20) "Facility" means any property, plant, building, structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties, in actual physical contact or separated solely by a public roadway or other public right-of way, and under common operational control, that includes one or more refrigeration system or air-conditioning system subject to this subarticle. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties
- (17) "Follow-up Verification Test" means a test that validates the effectiveness of repairs to a refrigeration or air conditioning system performed within 30 days of the completion of the repair and the system's return to normal operating characteristics and conditions. A follow-up verification test includes, but is not limited to, the use of soap bubbles, electronic or ultrasonic

<u>leak detectors, pressure or vacuum tests, fluorescent dye and black light, infrared or near infrared tests, or handheld gas detection devices.</u>

(21) "Facility Identification Number" means a unique identification number provided by the Executive Officer for each facility with a refrigeration or air-conditioning system.

(22) "Follow-up Verification Test" means those tests that involve checking the repairs within 30 days of the appliance's returning to normal operating characteristics and conditions. Follow-up verification tests for appliances from which the refrigerant charge has been evacuated means a test conducted after the appliance or portion of the appliance has resumed operation at normal operating characteristics and conditions of temperature and pressure, except in cases where sound professional judgment dictates that these tests will be more meaningful if performed prior to the return to normal operating characteristics and conditions. A follow-up verification test with respect to repairs conducted without evacuation of the refrigerant charge means a reverification test conducted after the initial verification test and usually within 30 days of normal operating conditions. Where an appliance is not evacuated, it is only necessary to conclude any required changes in pressure, temperature, or other conditions to return the appliance to normal operating characteristics and conditions.

(18 23) "Full Charge", "Optimal Charge", or "Critical Charge" means the amount of refrigerant required in the refrigerant circuit for normal operating characteristics and conditions of a refrigeration or air-conditioning system as determined by using one of the following three four methods:

- (A) Use of the equipment manufacturer's specifications of the full charge;
- (B) Use of calculations based on component sizes, density of refrigerant, volume of piping, seasonal variances, and other relevant considerations; or

(C) The midpoint of an established range for refrigerant charge based on the best available data regarding the normal operating characteristics and conditions for the system.

(19 24) "Global Warming Potential" or "GWP" means the <u>radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.</u>

total contribution to global warming resulting from the emission of one unit of a specific gas relative to one unit of the reference gas, carbon dioxide.

(25) "Global Warming Potential Value" or "GWP Value" means the 100-yr GWP value first published by the IPCC in its Second Assessment Report (SAR) (IPCC, 1995); or if a 100-yr GWP value was not specified in the IPCC SAR, it means the GWP value published by the IPCC in its Fourth Assessment A-3 Report (AR4) (IPCC, 2007); or if a 100-yr GWP value was not specified in the IPCC AR4, then the GWP value will be determined by the Executive Officer based on data, studies and/or good engineering or scientific judgment. Both the 1995 IPCC SAR values and the 2007 IPCC AR4 values are published in table 2.14 of the 2007 IPCC AR4. The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14."

(20 26) "High-GWP Refrigerant" or "Refrigerant" means a compound used as a heat transfer fluid or gas in a refrigeration or air-conditioning system that is a chlorofluorocarbon, a hydrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of containing these compounds, with a GWP value equal to or greater than 150, and any ozone depleting substance as defined in Title 40 of the Code of Federal Regulation, Part 82, §82.3.

(21 27) "Hydrochlorofluorocarbon" or "HCFC" means a class of <u>compounds</u> gases primarily used as refrigerants, consisting of <u>only</u> hydrogen, chlorine, fluorine, and carbon.

(22 28) "Hydrofluorocarbon" or "HFC" means a class of <u>compounds</u> gases primarily used as refrigerants, consisting of only hydrogen, fluorine, and carbon.

(29) "Initial Refrigerant Charge" means the quantity, in pounds, of refrigerant added to a refrigeration or air-conditioning system in order to bring the system to a full charge upon initial installation of a refrigeration or air-conditioning system.

(30) "Initial Verification Test" means leak tests that are conducted as soon as practicable after the repair is completed. An initial verification test, with regard to leak repairs that require the evacuation of the appliance or portion of the appliance, means a test conducted prior to the replacement of the full refrigerant charge and before the appliance or portion of the appliance has reached operation at normal operating characteristics and conditions of temperature and pressure. An initial verification test with regard to repairs conducted without the evacuation of the refrigerant charge means a test conducted as soon as practicable after the conclusion of the repair work.

(23) "Initial Verification Test" means a leak test that validates the effectiveness of repairs to a refrigeration or air conditioning system that is conducted as soon as practicable after a repair of a refrigeration or air conditioning system. When leak repairs require the evacuation of the refrigerant from the refrigeration or air conditioning system, or a portion of the refrigeration or air-conditioning system, initial verification test means a test conducted prior to the replacement of the full refrigerant charge and before the air-conditioning or refrigeration system, or portion of the system, has reached operation at normal operating characteristics and conditions. When repairs do not require the evacuation of refrigerant, initial verification test means a test conducted as soon as practicable after the conclusion of the repair work.

(31) "Low Temperature Refrigeration System" means a commercial or industrial refrigeration system used for frozen products.

- (32) "Medium Temperature Refrigeration System" means a commercial or industrial refrigeration system used for chilled products.
- (33) "New Stationary Refrigeration or Air-conditioning System" means a stationary refrigeration or air-conditioning system installed in a facility after July 1, 2010, or a stationary refrigeration or air-conditioning system in a facility where there is a change in the person with operational control of the facility after July 1, 2010.
- (34) "Non-Certified Technician" means a person who installs, maintains, services, repairs, modifies, or disposes of refrigeration or air-conditioning appliances that does not hold a current, valid, and applicable certificate pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161.
- (24 35) "Non-refillable cylinder" means a cylinder that is designed not to be refilled and is used in the servicing, maintenance or filling of a refrigeration or air-conditioning system, any refrigeration or comfort cooling appliance, motor vehicle air-conditioning system, or heat pump equipment.
- (25 36) "Normal Operating Characteristics and Conditions" means a refrigeration or air-conditioning system operating temperatures, pressures, fluid flows, speeds, and other characteristics, including full charge of the air-conditioning or refrigeration system that would be expected for a given process load and ambient condition during operation. Normal operating characteristics and conditions are marked by the absence of atypical conditions affecting the operation of the refrigeration or air-conditioning system.
- (26 37) "Perfluorocarbon" or "PFC" means a class of compounds ehemical consisting only of carbon and fluorine.

(27 38) "Person" means any person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, federal, state, or local governmental agency or public district.

(28 39) "Reclaim" means to reprocess refrigerant to all of the specifications in appendix A to Title 40, Code of Federal Regulations, Part 82, subpart F (based on ARI Standard 700–1995, Specification for Fluorocarbons and Other Refrigerants) that are applicable to that refrigerant and to verify that the refrigerant meets these specifications using the analytical methodology prescribed in section 5 of appendix A to Title 40, Code of Federal Regulations, Part 82, subpart F. means to process refrigerant to a level equivalent to new product specifications in accordance with the ARI 700 Standard.

(29 40) "Recover" means to remove refrigerant, in any condition, from a system an appliance and to store it in an external container without necessarily testing or processing it in any way.

(30) "Recycle" means to clean refrigerant for reuse by oil separation and single or multiple passes through moisture absorption devices, such as replaceable core filter driers that reduce moisture, acidity, and particulate matter.

(41) "Recycle" means to extract refrigerant from an appliance and clean refrigerant for reuse without meeting all of the requirements for reclamation. In general, recycled refrigerant is refrigerant that is cleaned using oil separation and single or multiple passes through devices, such as replaceable core filter-driers, which reduce moisture, acidity, and particulate matter.

(31 42) "Refillable cylinder" means a cylinder that is designed to be refilled and is used in the servicing, maintenance or filling of a refrigeration or air-conditioning system, motor vehicle air-conditioning system, or, heat pump equipment.

(32 43) "Refrigerant Circuit" means the parts of <u>a refrigeration or air-conditioning system an</u> appliance that are normally connected to each other (or are separated only by internal valves) and are designed to contain refrigerant.

(33) "Refrigerant Distributor" means a person that distributes refrigerant to retailers or to industrial, commercial, institutional or professional users. "Refrigerant Distributor" includes any person who imports refrigerant from outside of this state for sale to retailers or to industrial, commercial, institutional or professional users.

(44) "Refrigerant Distributor or Wholesaler" means a person to whom a product is delivered or sold for purposes of export, subsequent resale, or delivery to a certified technician, employer of a certified technician, appliance manufacturer, or another refrigerant distributor or wholesaler. "Refrigerant Distributor or Wholesaler" includes any person who imports refrigerant from outside of this state to distribute or sell refrigerant to a certified technician, employer of a certified technician, appliance manufacturer, or another refrigerant distributor or wholesaler, or who acts as an agent or broker in buying refrigerant.

(34 45) "Refrigerant Leak" means any discharge of refrigerant from <u>an appliance a refrigeration</u> or air conditioning system or certified refrigerant recovery or recycling equipment, or a refrigerant cylinder or other container into the atmosphere.

(35 46) "Refrigeration System" means stationary, non-residential equipment with a single refrigerant circuit that holds 50 pounds or more of any combination of high-GWP refrigerant that is intended or installed for the purpose of used for cooling or freezing for storage or manufacturing that holds more than 50 pounds of high-GWP refrigerant in any combination, including, but is not limited to, refrigerators and freezers; industrial process refrigeration

equipment used in chemical, pharmaceutical, petrochemical, food or beverage manufacturing; packaging or processing; power generation; and industrial ice manufacturing industries; and components and connections. "Refrigeration System" includes any appliance that is used for both providing cooling in order to control heat or humidity in facilities for the purpose of comfort for persons within a facility and cooling or freezing for storage or manufacturing.

(36) "Refrigerant Wholesaler" means a person that provides a full range of refrigerant services including selling to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or acts as an agent or broker in buying refrigerant. "Refrigerant Wholesaler" includes any person who imports refrigerant from outside of this state for sale to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or to act as an agent or broker in buying refrigerant.

(47) "Residential" means a residential dwelling containing four or fewer dwelling units on one lot or parcel.

(37 48) "Retire" means the permanent removal from service of a refrigeration or air-conditioning system rendering it unfit for use by the current or any future owner or operator.

(38) "Retrofit" means the replacement of a refrigeration or air conditioning system, upgrade of a refrigeration or air conditioning system or major repairs of a refrigeration or air conditioning.

Retrofit includes, but is not limited to, the following: changes in refrigerant used or changes in lubricants, gaskets, filters, driers, valves, o-rings or other components.

(49) "Retrofit" means the replacement of the refrigerant used in a refrigeration or air-conditioning system with a refrigerant approved under the Significant New Alternatives Policy (SNAP) program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.170, or a refrigerant approved by the Executive Officer, and related refrigeration or air-conditioning system changes required to maintain the refrigeration or air-conditioning system operation and reliability following refrigerant replacement.

(39 50) "Seasonal Adjustment" means the need to add refrigerant to a refrigeration or air-conditioning system due to a change in ambient conditions caused by a change in season, followed by the subsequent removal of refrigerant in the corresponding change in season, where both the addition and removal of refrigerant occurs within one consecutive 12-month period after the initial installation of a refrigeration or air-conditioning system or a repair of a refrigeration or air-conditioning system requiring evacuation or partial evacuation of the refrigerant circuit.

(51) "System Identification Number" means a unique identification number for each refrigeration and air-conditioning system at a facility. The System Identification Number is comprised of the Facility Identification Number followed by a hyphen, followed by a three digit number starting at 001 sequentially assigned to each unique refrigeration and air-conditioning system at a facility. For example, if a facility has a Facility Identification Number of ARB000001, then the first refrigeration and air-conditioning system System Identification Number would be ARB000001-001.

(40 52) "System Mothballing" means the intentional shutting down of a refrigeration or air-conditioning system for an extended period of time by the owners or operators of that facility, where the refrigerant has been evacuated from the refrigeration or air-conditioning system or the affected component of the refrigeration or air-conditioning system, at least to atmospheric pressure.

(4153) "Topping Off" means adding refrigerant to a refrigeration or air-conditioning system in order to bring the system to a full charge.

(42 54) "U.S. EPA" means the United States Environmental Protection Agency.

§ 9XXXX3 95383 . General Requirements for Stationary Refrigeration and Air-Conditioning System Registration and Leak Repair

(a) Registration for Operation

- (1) By January 31, 2010, the <u>The</u> owner or operator of <u>a facility with a new or an</u> existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant must register to operate with the <u>local Air</u> <u>District or the</u> Executive Officer. <u>Registration to operate is required by the due date of a facility's first reports required under subsection (f) of this section.</u>
- (2) By January 31, 2012, the owner or operator of an existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds, but less than 2000 pounds, of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.
- (3 2) By July 1, 2014, the owner or operator of <u>a facility with a new or an</u> existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds, but less than 200 pounds, of high-GWP refrigerant must register to operate with the <u>local Air District or the</u> Executive Officer.
- (4) On or after January 31, 2010, the owner or operator of a new stationary refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.
- (5 3) At minimum the information provided to register to operate must include, but is not limited to, the following:
 - (A) Facility information
 - 1. Facility Identification Number provided by Executive Officer
 - 1.2. Name of operator

- 3. Operator Federal Tax identification Number
- 4. Facility North American Industry Classification System Business Type Code
- 2.5. Name of facility, including a facility identifier such as store number
- 3. Facility identifier provided by Executive Officer or the local Air District.
- 6. Facility mailing address including an address, city, state, and zip code
- 7. Facility physical location address including an address, city, state, and zip code
- 4. 8. Facility contact person
- 5. 9. Facility contact person phone number
- 6.10. Facility contact person E-mail address
- (B) Refrigeration and Air-Conditioning System Equipment Information <u>for each</u> refrigeration and air-conditioning system.
 - 1. System Identification Number
 - 1. 2. Equipment type
 - 2. 3. Equipment manufacturer
 - 3. 4. Equipment model or description
 - 5. Equipment model year
 - 4. 6. Equipment serial number: The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the effected equipment or component is part of an assembly without serial number or does not have an individual serial number or is not

- accessible after assembly, the physical location of the effected equipment must be recorded in enough detail to permit positive identification.
- 5. 7. Physical location of a refrigeration or air-conditioning system (e.g. simple schematic/floor plan with equipment locations clearly noted).
- 6. 8. If equipment is a refrigeration system, Temperature temperature classification identify equipment as a low temperature system, a medium temperature system, or other
- 7. 9. Total refrigerant charge
- 10. Type of refrigerant used
- 8. Monthly refrigerant charge—report the amount of monthly additional refrigerant charge for the most recent calendar year, if an existing system.
- (6-4) A person registering to operate as described in subsection (a) of this section for a facility must provide payment according to the fee schedule established by the local Air District or the Executive Officer.

(5) Fees

- (A) The Executive Officer shall assess and collect implementation fees to recover the costs to the Executive Officer for evaluating registrations for operation and annual facility reports required under subsection (f) of this section, and conducting enforcement.
- (B) The Executive Officer shall collect an implementation fee upon initial registration for operation and annually thereafter for each facility with a refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant. An implementation fee shall be due and payable to the Executive Officer at the time a registration for operation is filed, 30 calendar days prior to a registration to operate expiration date, or as part of any request requiring a fee.

- (C) The Executive Officer shall collect an implementation fee upon initial registration for operation for each facility with a refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds, and less than 200 pounds, of high-GWP refrigerant. An implementation fee shall be due and payable to the Executive Officer at the time a registration for operation is filed.
- (D) A person registering to operate pursuant to subsection (a) of this section for a facility must provide payment according to the fees provided in Table I. The fees to be paid are based on the refrigeration or air-conditioning system existing at the facility with the largest refrigerant charge size.
- (E) Fees are nonrefundable except in circumstances as determined by the Executive Officer.
- (F) Failure to pay implementation fees when due may result in late fees or penalties.
- (G) If a registration for operation has expired or been cancelled for a facility with a refrigeration or air-conditioning system, an expired or canceled registration may be reactivated after payment of all implementation, late, and penalty fees. A registration for operation may be reissued under the original Facility Identification Number.
- (H) Fees shall be periodically revised by the Executive Officer in accordance with the consumer price index, as published by the United States Bureau of Labor Statistics.
- (I) Fees collected shall be deposited into the California Air Pollution Control Fund.

Table 1. Implementation Fees for Facilities with a Refrigeration and Airconditioning System per §95383.

Refrigeration and Air-conditioning Systems	Facility
	Implementation Fee
Facilities with Refrigeration and Air-conditioning	<u>\$370</u>
Systems with a Full Charge 2,000 pounds or	

Greater	
Facilities with Refrigeration and Air-conditioning	<u>\$170</u>
Systems with a Full Charge 200 pounds or Greater,	
and less than 2,000 pounds	
Facilities with Refrigeration and Air-conditioning	\$25 to \$100
Systems with a Full Charge 50 pounds or Greater,	
and less than 200 pounds	

(6) Duration of registration.

(A) Initial registration will be valid until the last day of the fiscal year for which a registration for operation is filed for a facility with a refrigeration or airconditioning system with a full charge greater than or equal to 200 pounds; registration for operation renewals will be valid for one fiscal year. Initial registration will be valid until the last day of the fiscal year for which a registration for operation is filed for a facility with a refrigeration or airconditioning system with a full charge greater than or equal to 50 pounds, and less than 200; registration for operation will be automatically renewed for four additional fiscal years.

(B) The Executive Officer shall send to the owner of a facility with a current registration to operate a refrigeration or air-conditioning system a registration to operate renewal and implementation fee invoice at least 60 days prior to the registration for operation expiration. Failure to send or receive a registration to operate renewal and implementation fee invoice does not relieve a facility owner or operator from paying all applicable fees when due.

(b) Leak Detection and Monitoring

(1) By January 31, 2010 July 1, 2010, the owners or operators of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of

high-GWP refrigerant, which operates with the refrigerant circuit entirely within an enclosed building or structure, and which operates, or is intended to be operated year-round must have an automatic leak detection system.

(A) A stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant, which does not operate with the refrigerant circuit entirely within an enclosed building or structure, but with a compressor, evaporator, condenser, and other components of high potential for refrigerant leaks located inside an enclosed building or structure, must have an automatic leak detection system

(2) After July 1, 2010, the owner or operator of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant, which operates with the refrigerant circuit in part outside an enclosed building or structure, and which operates, or is intended to be operated year-round must do the following:

(A) If a compressor, evaporator, condenser, and other components of high potential for refrigerant leaks are located outside an enclosed building or structure, a leak inspection must be conducted on these components quarterly using a calibrated electrical or electronic device; bubble test; or observation of oil residue. After observation of oil residue, a leak inspection must be conducted using a calibrated electrical or electronic device or bubble test to confirm a refrigerant leak.

(2 3) After January 31, 2010 July 1, 2010, the owners or operators of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds, but and less than 2000 pounds, of high-GWP refrigerant, which operates, or is intended to be operated year-round, or a stationary air-conditioning system, with a full charge greater than or equal to 200 pounds, but less than 2000 pounds, of high-GWP refrigerant, must conduct a leak inspection of the refrigeration or air-conditioning system quarterly using a calibrated mechanical, electrical, or electronic device; bubble test; or DRAFT – DO NOT CITE OR QUOTE

observation of oil residue. After observation of oil residue, a leak inspections must be conducted using a Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test to confirm a refrigerant leak. A quarterly leak inspection of the refrigeration or air-conditioning system is not required if an automatic leak detection system is used to monitor the refrigeration or air-conditioning system, uses an automatic leak detection system.

- (3 <u>4</u>) After January 31, 2014 July 1, 2010, the owners or operators of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds, but and less than 200 pounds, of high-GWP refrigerant, and which operates, or is intended to be operated year-round, or a stationary air conditioning system with a full charge greater than or equal to 50 pounds, but less than 200 pounds, of high-GWP refrigerant, must conduct a leak inspection of the refrigeration or air-conditioning system annually using a calibrated mechanical, electrical, or electronic device; bubble test; or observation of oil residue. After observation of oil residue, a leak inspections must be conducted using a Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test to confirm a refrigerant leak. A once per year leak inspection of the refrigeration or air-conditioning system is not required if an automatic leak detection system is used to monitor the refrigeration or air-conditioning. system uses an automatic leak detection system.
- (4 5) A facility that installs an automatic leak detection system <u>using a direct system to</u> <u>detect the presence of refrigerant leaked must place sensors or intakes such that they will measure the refrigerant concentrations in air in proximity to principal components of the refrigeration or air-conditioning system such that areas of the system most likely to leak are monitored. Continuous monitoring must be conducted, at a minimum, but not limited to, in the proximity of the compressor, evaporator, condenser, and other areas of high potential for refrigerant leaks; except in systems in which these components are combined.</u>

- (5 6) An All automatic leak detection systems using a direct system to detect the presence of refrigerant must be audited and calibrated at least annually using manufacturer recommended procedures to meet the following specifications.
 - (A) Be able and maintained to accurately detect a concentration level of 10 parts per million of vapor of the specific refrigerant or refrigerants used in the refrigeration or air-conditioning system(s).
 - (B) Be able and maintained to alert the operator when the maximum refrigerant concentration alarm level of a specific refrigerant used in the refrigeration or airconditioning system is reached. The maximum refrigerant concentration alarm level is 50 parts per million of vapor of the specific refrigerant or refrigerants used in the refrigeration or air-conditioning system(s).
- (7) A facility that installs an automatic leak detection system using an indirect system that automatically interprets measurements (e.g. temperature and pressure) to indicate a refrigerant leak must be audited and calibrated at least annually using manufacturer recommended procedures to meet the following specifications.
 - (A) Be able and maintained to alert the operator when measurements indicate a loss of refrigerant of 10 percent of the refrigeration or air-conditioning system full charge or 50 pounds, whichever is less.
- (6) Any stationary refrigeration system that does not operate, or is not intended to operate year round upon initiating each operation of the refrigeration system must conduct a leak inspection—using a calibrated mechanical, electrical, or electronic device; bubble test; or observation of oil residue. Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test.
- (8) If an automatic leak detection systems alerts the owner or operator that the maximum refrigerant concentration alarm level has been reached, the owner or operator must ensure that a leak inspection is conducted using a calibrated electrical or electronic device or bubble test to confirm the refrigerant leak and determine the refrigerant leak location.
- (9) Any stationary refrigeration or air-conditioning system that does not operate, or is not intended to operate year-round must conduct a leak inspection within 30 days upon

initiating each operation of the refrigeration or air-conditioning system, using a calibrated electrical or electronic device; bubble test; or observation of oil residue. After observation of oil residue, a leak inspection must be conducted using a calibrated electrical or electronic device or bubble test to confirm a refrigerant leak. A leak inspection upon initiating operation of a refrigeration or air-conditioning system is not required if there has been a leak inspection of the refrigeration or air-conditioning system conducted within the preceding 90 days.

(10) After July 1, 2010, owners or operators of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds of high-GWP refrigerant must conduct a leak inspection of the refrigeration or air-conditioning system using a calibrated electrical or electronic device; bubble test; or observation of oil residue at any time an additional refrigerant charge equal to or greater than 5 pounds, or one percent of the full charge, whichever amount is greater, is added to a refrigeration or air-conditioning system. After observation of oil residue, a leak inspection must be conducted using a calibrated electrical or electronic device or bubble test to confirm a refrigerant leak.

(c) Leak Repair

- (1) The owner or operator of a stationary refrigeration or air-conditioning system must ensure the repair of any refrigerant leak and maintain records of refrigerant leak repairs.
 - (A) A refrigerant leak must be repaired <u>by a certified technician</u> within 14 days of leak detection, as <u>evidenced evident</u> by the need to add refrigerant or <u>as detected by a leak inspection or detected by an automatic leak detection system, or any indication of refrigerant discharge to the atmosphere at any time. If the certified technician conducting the leak repair is not an employee of the owner or operator, the certified technician must hold a current and active California contractors license or be an employee of a person who holds a current and active California contractors license.</u>

- (B) The <u>leak repair must include owner or operator must conduct</u> an initial verification test <u>conducted</u> upon completion of repairs <u>and</u> when the system is operating at normal <u>operating characteristics and</u> conditions.
- (C) The <u>leak repair must include owner or operator of a refrigeration or air</u> conditioning system must conduct a follow-up verification test on the complete refrigeration or air-conditioning system; the. The follow-up verification test must be conducted <u>when the system is operating</u> at normal operating characteristics and conditions.
- (2) If either the initial or follow-up verification test indicate that the repairs have not been successful, meaning that leaks are still occurring within the refrigeration or air-conditioning system or component(s) requiring repair, the owner or operator must make a subsequent attempt at repairing the leak, or retrofit or retire the refrigeration or air-conditioning system or leaking component(s), in its/their entirety, within 14 days of the failed verification. If the refrigerant leak verification test is not successful after three successive attempts to repair the a refrigerant leak, the owner or operator must prepare submit a retrofit or retirement plan to the Executive Officer or local Air District-within 14 days of the failed verification to retrofit repair or retire the leaking refrigeration or air-conditioning system or component(s), in its/their entirety.
- (3) The owner or operator of a refrigeration or air-conditioning system may have <u>up to 60</u> more than 14 days to repair a refrigerant leak, or replace the leaking component(s) if one or more of the following conditions apply:
 - (A) A certified technician is not available to complete the repair or replace the components(s).
 - (B) The necessary parts for an appliance component(s) are unavailable and the owner or operator maintains a written statement from the appliance or component manufacturer or distributor stating the unavailability of parts.
 - (C) The owner or the operator has received <u>a conditional exemption approval</u> from the Executive Officer <u>pursuant to §95388.</u> or APCO to permanently retire

- the entire refrigeration or air conditioning system from operation or retrofit the entire appliance with a substitute with a lower GWP.
- (4) The retirement or retrofit plan that is approved by the Executive Officer or APCO must be maintained on site at the physical location of the affected refrigeration or air conditioning system.
- (5 <u>4</u>) The amount of time for owners or operators to complete and verify repairs, prepare, replace components, and implement written retrofit or retirement plans under paragraph (2) of this <u>sub</u>section is temporarily suspended during the time that an appliance is undergoing system mothballing.
- (6 5) The time for owners or operators to complete repairs, replace components, or fully implement written retrofit or retirement plans will resume on the day the appliance is brought back on-line, indicating that the appliance is no longer undergoing system mothballing.
- (d) **Retrofit and retirement plan:** The owner or operator of a refrigeration or air-conditioning system must <u>prepare and</u> maintain a dated retrofit or retirement plan that establishes a six-month schedule to retrofit or retire a leaking refrigeration or air-conditioning system.
 - (1) The retrofit and retirement plan must be approved by the Executive Officer or APCO. The retrofit or retirement plan is approved if the Executive Officer or APCO does not respond within 30 calendar days after the plan is received.
 - (2 1) The retrofit and retirement plan must be maintained at the site of a leaking refrigeration or air-conditioning system. If a refrigeration or air-conditioning system is to be retired and replaced, the retirement plan must include information specific to the new refrigeration or air-conditioning system to be constructed or installed, including, but not limited to, the following: If a refrigeration or air-conditioning system is to be retrofitted, the retrofit plan must include information specific to the refrigeration or air-conditioning system after the retrofit has been completed. A retrofit and retirement plan must include, but is not limited to, the following:

- (A) System Identification Number of the refrigeration or air-conditioning system being replaced or retrofitted.
- (A B) Equipment type
- (BC) Equipment manufacturer
- (CD) Equipment model or description
- (D) Equipment serial number. An equipment serial number is not required if a refrigeration or air conditioning system is assembled with multiple components with individual serial numbers.
- (E) <u>Intended physical Physical</u> location of a refrigeration or air-conditioning system
- (F) <u>If the equipment type is a refrigeration system, temperature</u> Temperature classification identify equipment as a low temperature system, a medium temperature system, or other
- (G) Type of refrigerant used
- (H) Total refrigerant charge
- (I) A plan for the old refrigeration or air-conditioning system disposition.
- (J) A retrofit <u>or retirement plan must include a detailed timetable</u>, <u>including</u>, but is not limited to, the following:
 - 1. Procedure for flushing old refrigerant and lubricant
 - 2. Procedures for changes in lubricants, filters, gaskets, o-rings, and valves
- (K) A detailed timetable, including, but not limited to:
 - 1. The anticipated date to begin the installation, construction, or retrofit of the refrigeration or air-conditioning system.
 - 2. The anticipated date to complete the installation, construction, or retrofit of the refrigeration or air-conditioning system.

3. The anticipated date to submit a registration for operation for the new refrigeration or air-conditioning system.

(e) Required Service Practices

- (1) A person <u>installing</u>, maintaining, servicing, or repairing, <u>modifying</u>, or <u>disposing of a refrigeration or air-conditioning and refrigeration equipment appliance must satisfy all the following requirements:</u>
 - (A) Must not intentionally disrupt the refrigerant circuit of any refrigeration or air-conditioning appliance system resulting in a discharge of refrigerant to the atmosphere in order to prepare such unit for recycling or disposal, unless an attempt to recover refrigerant is made using certified refrigerant recovery or recycling equipment.
 - (B) Must make Make a recovery attempt using certified refrigerant recovery or recycling equipment for that type of refrigeration or air-conditioning appliance prior to opening the system to atmospheric conditions. Attempts to recover refrigerant must be made even if the person has reason to believe that all refrigerant has been removed or has previously leaked from the appliance system. Refrigerant may be returned to the refrigeration or air-conditioning appliance from which it is recovered from or to another refrigeration or air-conditioning appliance owned by the same person without being recycled or reclaimed.
 - (C) Must not use a refrigerant in any refrigeration or air-conditioning <u>appliance</u> system, unless such refrigerant has <u>U.S.</u> EPA approval under the Significant New Alternatives Policy (SNAP) program pursuant to Section 612 of the U.S. Clean Air Act, or is approved by the Executive Officer.
 - (D) Must not add a refrigerant charge to a stationary refrigeration or air-conditioning system appliance known or expected to have a refrigerant leak without making an attempt to repair leaks in the system appliance, excluding a refrigerant charge for seasonal adjustment.

- (E) Must hold a current, valid, and applicable certificate issued by the U.S. EPA in accordance with Title 40 of the Code of Federal Regulations, Part 82, §82.161. Subpart F (Standards for Stationary AC/Refrigerant Service).
- (F) Must employ procedures for which the certified refrigerant recovery or recycling equipment was approved by the U.S. EPA or Executive Officer.
- (G) Must use certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications are in conflict with the procedures for the certified refrigerant recovery or recycling equipment approved by the U.S. EPA or Executive Officer.
- (H) Must evacuate refrigerant from a non-refillable cylinder until the cylinder pressure has been reduced to a minimum of 102mm (4 in) of mercury below atmospheric pressure. The non-refillable cylinder pressure must maintain a minimum of 102mm (4 in) of mercury below atmospheric pressure for at least 5 minutes after being detached from Certified Refrigerant Recovery or Recycling Equipment. A certified technician must verify that the applicable level of evacuation has been reached and maintained in the non-refillable cylinder prior to recycling or disposal.
- (I) Satisfies job site evacuation of refrigerants during recycling, recovering, reclaiming, or disposing in accordance with Title 40 of the Code of Federal Regulations §82.156.
- (2) A person installing, servicing, modifying, or disposing of any refrigeration or air-conditioning system, must satisfy all of the following requirements:
 - (A) Recovers the refrigerant using certified refrigerant recovery or recycling equipment for that type of refrigeration or air conditioning system. Refrigerant may be returned to the refrigeration or air conditioning system from which it is

- recovered from or to another refrigeration or air-conditioning system owned by the same person without being recycled or reclaimed.
- (B) Employs procedures for which the certified refrigerant recovery or recycling equipment was approved by the US EPA.
- (C) Uses certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications are in conflict with the procedures for the certified refrigerant recovery or recycling equipment approved by the US EPA or Executive Officer.
- (D) Satisfies job site evacuation of refrigerants during recycling, recovering, reclaiming, or disposing in accordance with applicable regulations of the U.S. EPA as contained in Part 82, Subpart F, Section §82.156, of.
- (f) Reporting and Recordkeeping The owner or operator of a facility that contains a refrigeration or air-conditioning system with a full refrigerant charge over greater than or equal to 50 200 pounds must maintain records and report to the Executive Officer, or local Air District as follows: The owner or operator of a facility that contains a refrigeration or air-conditioning system with a full refrigerant charge greater than or equal to 50 pounds must maintain records.
 - (1) The owner or operator of a <u>facility with a</u> stationary refrigeration or air-conditioning system <u>with a full refrigerant charge greater than or equal to 200 pounds</u> must annually report to the <u>local Air District or the</u> Executive Officer all refrigeration and air-conditioning service and refrigerant leak repairs completed, refrigerant purchased, and refrigerant shipped for reclamation or destruction during the prior <u>calendar fiscal</u> year.
 - (A) The owner or operator An operator of a facility with an existing refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant must submit reports required pursuant to this subsection by August 31, 2011 for the 2010 fiscal year, required reports within 60 days after the end of the 2010 calendar

<u>fiscal year</u>, and <u>by August 31 within 60 days</u> after the end of each subsequent <u>ealendar fiscal</u> year. <u>The annual report of refrigeration and air-conditioning service and leak repairs required pursuant to this subsection must include information, at minimum, for each refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant.</u>

- (B) The owner or operator An operator of a an existing refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant must submit reports required pursuant to this subsection by August 31, 2013 for the 2012 fiscal year, required reports within 60 days after the end of the 2010 calendar fiscal year, and by August 31 within 60 days after the end of each subsequent calendar fiscal year. The annual report of refrigeration and air-conditioning service and leak repairs required pursuant to this subsection must include information, at minimum, for each refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant.
- (C) An operator of a refrigeration or air conditioning system with a full charge greater than or equal to 50 pounds of high GWP refrigerant must submit required reports within 60 days after the end of the 2014 calendar year, and within 60 days after the end of each subsequent calendar year.
- (C) The owner or operator of a facility with a new stationary refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant must submit reports required pursuant to this subsection by August 31, 2013 for the 2012 fiscal year, and by August 31 after the end of each subsequent fiscal year. If the new stationary refrigeration or air-conditioning system is installed after June 30, 2013, then the facility owner or operator must submit reports required pursuant to this subsection by August 31 after the end of the fiscal year in which the new stationary refrigeration or air-conditioning system is installed, and by

August 31 after the end of each subsequent fiscal year. The annual report of refrigeration and air-conditioning service and leak repairs required pursuant to this subsection must include information, at minimum, for each refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant.

- (2) An annual fiscal year report of refrigeration and air-conditioning service and leak repairs must include each service automatic leak detection system audit, leak inspection, and service and refrigerant leak repair that included an additional refrigerant charge equal to or greater than 5 pounds, or one percent of the full charge, whichever amount is greater for each refrigeration and air-conditioning system. The annual fiscal year report of refrigeration and air-conditioning service and leak repair report must include, but is not limited to, the following:
 - (A) System Identification Number
 - (AB) Equipment Manufacturer
 - (BC) Equipment Model or Description
 - (CD) Equipment Serial number. The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the affected equipment or component is part of an assembly without serial number or does not have an individual serial number or is not accessible after assembly, the physical location of the effected equipment must be recorded in enough detail to permit positive identification.
 - (E) Date of initial installation
 - (F) Date of last leak repair
 - (D) Date leak detected
 - (<u>E H</u>) Date service provided or leak repair completed
 - (I) Cause of refrigerant leak, if applicable

- (J) Description of leak repair or service
- (**F** K) Date of initial verification test
- (G L) Date of follow-up verification test, if applicable
- (<u>H M</u>) Total additional refrigerant charge of each type of high-GWP refrigerant or refrigerant blend.
- (N) Purpose for additional refrigerant charge (Leak Repair, Topping Off, Initial Refrigerant Charge, or Seasonal Adjustment)
- (4 O) Name of certified technician completing leak repair
- (J P) U.S. EPA certificate number of certified technician completing leak repair. The certified technician's identification number issued by an approved technician certification program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161.
- (Q) The certified technician's certification type(s) issued by an approved technician certification program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161.
- (3) An annual fiscal year report of refrigerant purchased and used by the facility owner or operator must include, but is not limited to, the following:
 - (A) The total <u>weight in pounds</u> quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was purchased.
 - (B) The total <u>weight in pounds</u> quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was charged into a refrigeration or airconditioning system.
 - (C) The total <u>weight in pounds</u> quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was recovered from a refrigeration or airconditioning system.

- (D) The total weight in pounds of each type of high-GWP refrigerant and refrigerant blend that was stored in inventory at the facility, or stored at a different location for use by the facility, on the last day of the fiscal year.
- (E) The total weight in pounds of each type of high-GWP refrigerant and refrigerant blend that was shipped by the owner for reclamation and destruction.
- (4) A report of refrigerant shipped for reclamation or destruction must include, but not limited to, the following:
 - (A) Name of facility refrigerant is shipped to.
 - (B) Address facility refrigerant is shipped to.
 - (C) Type of refrigerant or refrigerant blend shipped.
 - (D) Quantity, in pounds, of refrigerant shipped.
 - (E) Date of shipment.
 - (F) Purpose of shipment (e.g., reclamation, destruction).
- (4) The following records must be retained by all facilities for a minimum of 5 years and must be made available to the Executive Officer or APCO upon request.
 - (A) Registration to operate required by subsection (a) of this Section.
 - (B) A log of all service and refrigerant leaks and repairs required by subsection (c) of this Section.
 - (CB) Documentation of all leak detection systems, leak inspections, and automatic leak detection system annual audit and calibrations required by subsection (b) of this Section.
 - (DC) Records Leak reports and logs of all service and refrigerant leaks and repairs, and documentation of any conditions allowing repair of a refrigerant leak to be conducted greater than 14 days after leak detection as leak and repair activities required by subsection (c) of this Section.

- (**E D**) Retrofit and retirement plans required by subsection (d) of this Section.
- (FE) All reports required by subsection (f) of this Section.
- (GF) Documentation and invoices of all refrigerant purchases.
- (H G) Documentation of all shipments of refrigerants for reclamation or destruction, including a transportation bill-of-lading or other transportation document to document all shipment of refrigerants. The documentation must include, but is not limited to, the following:
 - 1. Name of facility refrigerant is shipped to.
 - 2. Address facility refrigerant is shipped to.
 - 3. Weight Quantity in pounds of refrigerant shipped.
 - 4. Type of refrigerant or refrigerant blend purchased.
 - 5. Date of shipment.
 - 6. Purpose of shipment (e.g. reclamation, destruction).
- (I H) Documentation of all refrigeration and air-conditioning systems component data, measurements, calculations and assumptions used to determine the full charge.

§ 9XXX4 95384. General Requirements for Refrigerant Use, Sale, and Disposal

- (a) Required Service Practices: A person installing, servicing, modifying, or disposing of any refrigeration or air conditioning system, must meet all of the following requirements
 - (1) Recovers the refrigerant using certified refrigerant recovery or recycling equipment for that type of refrigeration or air-conditioning system. Refrigerant may be returned to the refrigeration or air-conditioning system from which it is recovered from or to another refrigeration or air-conditioning system owned by the same person without being recycled or reclaimed.

- (2) Employs procedures for which the certified refrigerant recovery or recycling equipment was approved by the US EPA or Executive Officer.
- (3) Uses certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications are in conflict with the procedures for the certified refrigerant recovery or recycling equipment approved by the US EPA or Executive Officer.
- (4) On and after January 1, 2010, a certified technician may service, modify, or dispose only refrigeration or air conditioning systems, or components, that they are certified to service, modify, or dispose based on their certification type in accordance with Part 82 of Title 40 of the Code of Federal Regulations.
- (b) On and after January 1, 2010, a person must not sell or distribute any high-GWP refrigerant for use as a refrigerant in a container with a water capacity greater than 2 pounds, and less than 125 pounds, to a certified technician unless:
 - (1) The refrigerant is sold in a refillable cylinder, or
 - (2) The refrigerant is sold in a non-refillable cylinder and a deposit of \$35 is collected.

 (A) On and after January 1, 2010, a person selling or distributing any high GWP refrigerant for use as a refrigerant in a container with a water capacity greater than 2 pounds, and less than 125 pounds, and collecting a deposit must meet all the following requirements:
 - 1. Provide proof of purchase that separately identifies the amount of deposit paid pursuant to subsection (b).
 - 2. Pay the certified technician, or their representative, at the time a non-refillable cylinder is returned, a refund in the amount of the deposit specified in this section. Payment of a refund in the amount of the deposit specified is not required if the certified technician, or their representative,

does not provide proof of purchase, including proof of payment of a deposit.

- (B) A refrigerant distributor may designate additional facilities to receive and store used non-refillable cylinders from certified technicians, and to pay certified technicians, or their representative, refunds specified in this section.
- (C) A refrigerant distributor, or designee, must recover any refrigerant remaining in a returned non-refillable cylinder and must use certified refrigerant recovery or recycling equipment. Any refrigerant recovered from a returned non-refillable cylinder must be reclaimed or destroyed.

(b a) Prohibitions

- (1) On or after January 1, 2010 July 1, 2010, a person must not sell, distribute, offer for sale or distribution, or purchase any high-GWP refrigerant for use as a refrigerant in a container with a refrigerant capacity greater than two pounds to a person unless:
 - (A) The buyer is a certified technician pursuant to Part 82 of Title 40 of the Code of Federal Regulations; Title 40 of the Code of Federal Regulations, Part 82, \$82.40 or \$82.161; or
 - (B) The buyer employs at least one technician who is certified pursuant to Title 40 of the Code of Federal Regulations, Part 82, §82.40 or §82.161, is in full compliance with Title 40 of the Code of Federal Regulations, Part 82, §82.166, and has provided supporting evidence that at least one technician is properly certified to the wholesaler who sells them refrigerant; or
 - ($\underline{\mathbf{B}}$ $\underline{\mathbf{C}}$) The refrigerant is sold only for eventual resale to certified technicians, to air-conditioning or refrigeration appliance manufacturers, or the refrigerant is being sent for reclamation; or
 - $(\ensuremath{\mathbf{C}}\xspace)$ The refrigerant is contained in a refrigeration or air-conditioning system appliance.

- (2) A person must not sell used refrigerant to a new owner for use as a refrigerant unless the used refrigerant has first been reclaimed by a U.S. EPA-certified refrigerant reclaimer.
- (3) A person must not sell, or distribute, or offer to sell or distribute any refrigerant for any refrigeration or air-conditioning appliance unless such refrigerant has U.S. EPA approval under the Significant New Alternatives Policy (SNAP) program pursuant to Section 612 of the U.S. Clean Air Act. Title 40 of the Code of Federal Regulation, Part 82, §82.170, or is approved by the Executive Officer.
- (4) A person must not recycle or dispose a non-refillable cylinder prior to evacuating refrigerant from a non-refillable cylinder to a minimum of 102mm (4 in) of mercury below atmospheric pressure. The non-refillable cylinder pressure must maintain a minimum of 102mm (4 in) of mercury below atmospheric pressure for at least 5 minutes after being detached from Certified Refrigerant Recovery or Recycling Equipment.
- (4) A person must not intentionally disrupt the refrigerant circuit of any refrigeration or air-conditioning system in order to prepare such unit for recycling or disposal, unless an attempt to recover refrigerant is made while properly using certified refrigerant recovery or recycling equipment.
- (5) A certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler must not dispose of a cylinder in California used to store or transport high-GWP refrigerant unless the disposal or recycling facility accepting the cylinder evacuates the cylinder under vacuum and delivers recovered refrigerant to an EPA certified refrigerant reclaimer.
- (6 5) A person must not distribute or sell certified refrigerant recovery or recycling equipment unless such equipment meets all of the requirements of ARI Standard 740 and has been independently tested to meet the requirements of the standard by Underwriters Laboratories (UL) or the Air Conditioning, Heating and Refrigeration Institute (AHRI).
- (7 6) A person must not refill a non-refillable cylinder or use it as a temporary receiver during service.

(8 7) A person must not repair or modify a non-refillable cylinder in any way to allow the non-refillable cylinder to be refilled.

(c) Reporting and Recordkeeping

- (1) Refrigerant distributor and or wholesaler annual reporting: a Refrigerant Distributor or Wholesaler a person distributing or wholesaling a high GWP refrigerant must submit a report to the Executive Officer by August 31, 2011 for the 2010 fiscal year, and by August 31 within 60 days after the end of the 2010 calendar year, and within 60 days after the end of each subsequent calendar fiscal year. An annual report must include, but is not limited to, the following information:
 - (A) Name of Distributor or Wholesaler
 - (B) Name of facility
 - (C) Facility mailing address including an address, city, state, and zip code
 - (D) Facility contact person
 - (E) Facility contact person phone number
 - (F) Facility contact person E-mail address
 - (A <u>G</u>) The total <u>weight in pounds</u> quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was <u>purchased or received</u>. shipped to service technicians and contractors.
 - (BH) The total weight in pounds quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was sold or distributed for the purposes of 1) use in new equipment, and 2) use in servicing existing equipment.

 Shipped to a certified refrigerant reclaimer.

- (C I) The total weight in pounds quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was shipped to a certified reclaimer. number of non-refillable cylinders sold and total deposits collected
- (D) The total number of non-refillable cylinders received for a return on a deposit and total paid in deposits.
- (2) Refrigerant reclaimer annual reporting: <u>a certified reclaimer reclaiming a high-GWP refrigerant a person reclaiming, recovering, or recycling a high-GWP refrigerant must submit a report to the Executive Officer <u>by August 31, 2011 for the 2010 fiscal year, and by August 31 within 60 days after the end of the 2010 calendar year, and within 60 days after the end of each subsequent <u>calendar fiscal</u> year. An annual report must include, but is not limited to, the following information:</u></u>
 - (A) Name of Reclaimer
 - (B) Name of facility
 - (C) Facility mailing address including an address, city, state, and zip code
 - (D) Facility contact person
 - (E) Facility contact person phone number
 - (F) Facility contact person E-mail address
 - (A G) The total weight in pounds quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was collected for reclamation or destruction.
 - (B) The total quantity in mass of each type of high GWP refrigerant and refrigerant blend that was collected for destruction.
 - (<u>C H</u>) The total weight in pounds quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was reclaimed.
 - (**D** <u>I</u>) The total weight in pounds quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was destroyed or shipped for destruction.
 - (E) The total number of non-refillable cylinders sold and total deposits collected

- (F) The total number of non-refillable cylinders received for a return on a deposit and total paid in deposits.
- (G) A record of transactions for each type of recovered high GWP refrigerant or refrigerant blend that was received from a certified technician, contractor, or other source. The record of transactions must include, but is not limited to, the following information:
 - 1. Name of certified technician, contractor, or other source.
 - 2. Address certified technician, contractor, or other source.
 - 3. Type of refrigerant or refrigerant blend received.
 - 4. Quantity in pounds of refrigerant received.
 - 5. Date of receipt.
 - 6. Purpose of receipt (e.g., reclamation, destruction).
- (3) The following records must be retained by all refrigerant distributors and or wholesalers and certified reclaimers for a minimum of 5 years and must be made available to the Executive Officer upon request.
 - (A) Annual reports required by subsection (g c) of this Section.
 - (B) Documentation and invoices of all refrigerant <u>received through sale or transfer and all refrigerant distributed through sale or transfer sales.</u>
 - (C) Documentation of all shipments of refrigerants (including a transportation bill-of-lading or other transportation document.) to document all shipment of refrigerants. The documentation must include, but is not limited to, the following:
 - 1. Name of facility refrigerant is shipped to.
 - 2. Address facility refrigerant is shipped to.
 - 3. Type of refrigerant or refrigerant blend received.

- 4. Quantity, in pounds, of refrigerant shipped.
- 5. Date of shipment.
- (4) The following records must be retained by all certified reclaimers for at least 5 years and must be made available to the Executive Officer upon request.
 - (A) Annual reports required by subsection (g) of this Section.
 - (B) Documentation and invoices of all refrigerant purchases and sales.
 - (C) Documentation of all shipments of refrigerants, including a transportation bill of lading or other transportation document. The documentation must include, but is not limited to, the following:
 - 1. Name of facility refrigerant is shipped to.
 - 2. Address facility refrigerant is shipped to.
 - 3. Type of refrigerant or refrigerant blend received.
 - 4. Quantity in pounds of refrigerant shipped.
 - 5. Date of shipment.

§ 9XXX5 95385. Confidentiality.

- (a) All reports and information submitted to the Executive Officer for Refrigeration System and Air-conditioning System service and leak repair under this subarticle are emissions data under Government Code, section 6254.7, subdivision (e), and as such are public records upon their submittal. Persons may not designate such reports or information as confidential, and any such designation applied will not be effective in triggering the procedures in Subchapter 4 (beginning with section 91000) of Chapter 1 of California Code of Regulations for determining whether submitted information is confidential.
- (b) Except as provided in subsection (a), any person submitting information to the Executive Officer pursuant to this subarticle under claim of confidentiality must clearly and prominently identify such information as "confidential" to obtain the procedural safeguards in Subchapter 4 (beginning with section 91000) of Chapter 1 of California Code of Regulations for confidential

Submissions. Any claim of confidentiality by a person submitting information to the Executive Officer must be based on the person's belief that all information marked as confidential is either trade secret or otherwise exempt from public disclosure under the California Public Records Act (Government Code,

All stationary refrigeration and air-conditioning system service and leak repair, refrigerant purchase, and refrigerant shipments for reclamation and destruction reporting submitted to the Executive Officer under this article is public information and shall not be designated as confidential.

(b) Except as provided in subsection (a), any person submitting information to the Executive Officer pursuant to this article may designate such information that is not refrigeration and air-conditioning service and leak repair reporting as confidential because it is a trade secret or otherwise exempt from public disclosure under the California Public Records Act (Government Code section 6250 et seq.). All such requests for confidentiality shall be handled in accordance with the procedures specified in title 17, California Code of Regulations, sections 91000 to 91022.

§ 9XXX5 95386. Enforcement

(a) For purposes of inspecting a refrigeration system or air-conditioning system subject to this subarticle or inspecting or auditing the records of the owners and operators of these systems to determine compliance with this subarticle, an agent or employee of ARB, upon presentation of proper credentials, has the right to enter any Facility or any other property where records required by this subarticle may be kept.

(a b) If the Executive Officer or APCO finds any Any violation of this subarticle by any facility owner or operator, certified technician, non-certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler, or other person may be enjoined pursuant to section 41513 of the Health and Safety code. Penalties for any violation may be assessed under Article 3

(commencing with Section 42400) of Chapter 4 of Part 4 of Division 26 of the Health and Safety Code, and the Executive Officer may pursue any other available remedies for a violation.

does not comply with the requirements of this Article, the Executive Officer or APCO may assess penalties to the extent permissible under Chapter 1.5 of Part 5, Division 26 of the Health and Safety Code commencing with Section 42400.

- (c) Before seeking remedial action against any certified technician, certified reclaimer, refrigerant distributor or wholesaler, the Executive Officer will consider any information provided by the certified technician, certified reclaimer, refrigerant distributor or wholesaler.
- (c) The failure to submit any report required under this subarticle, to include all information required in a report, or to correct a report containing inaccurate statements shall constitute a single, separate violation of this subarticle for each day that the report has not been submitted, made complete or corrected.

§ 95387 Sunset Provision

The requirements specified in section 98383 shall cease to apply within the geographical area of any Air District that adopts and enforces requirements that will achieve emission reduction benefits that are equivalent to or greater than those achieved by section 98383. Section 98383 shall remain in effect until the Executive Officer issues written findings that an Air District has adopted and is enforcing requirements that will achieve equivalent or greater reductions within that Air District than continued enforcement of section 98383 in the same district, at which time section 98383 will not apply to Facilities within that Air District.

§ 95388. Conditional Exemptions.

(a) Exemption Applications.

(1) A person may apply in writing to the Executive Officer for an exemption set forth in subsections (a)(1)(A) or (a)(1)(B). The application must include documentation in support of the exemption request. All information submitted pursuant to this section will be handled in accordance with the procedures specified in California Code of

Regulations, section 91000 et seq. (Disclosure of Records). The Executive Officer may approve the following exemptions:

- (A) Greenhouse Gas Lifecycle. The Executive Officer may allow the continuation of a refrigerant leak for a specified time period of no longer than three years if the Executive Officer determines that the user has provided clear and convincing documentation that the refrigerant leak cannot be repaired and continuation of the refrigerant leak will result in less greenhouse gas emissions and will provide equivalent or greater protection to public health than retiring and replacing the leaking refrigeration or air-conditioning system. The demonstration must include information about lifecycle greenhouse gas emissions such as energy use and calculate emissions based on the average lifetime of the refrigeration or airconditioning system, facility, or process. The applicant must also provide a mitigation plan that includes a list of proposed actions to reduce and minimize emissions. The plan must include analysis of options to minimize usage, reduce leaks or venting, and recycling or destruction or refrigerant. (B) Economic Hardship. The Executive Officer may allow the continuation of a refrigerant leak for a specified time period of no longer than three years if the
- Executive Officer determines that the applicant has provided clear and convincing documentation that:
 - 1. Compliance would result in extraordinary economic hardship. Extraordinary economic hardship could include closure of the entire facility or a large portion of the facility or loss of a large portion of revenue to businesses outside of California; and
 - 2. The public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of greenhouse gases that would result from issuing the exemption; and
 - 3. A compliance report proposed by the applicant can be implemented and will achieve compliance as expeditiously as possible. The compliance

report would reasonably detail if and when compliance could be achieved and the method by which the applicant will seek to achieve compliance.

(b) Review of Application.

- (1) Within 30 days of receipt of the exemption application the Executive Officer will determine whether an application is complete.
- (2) If the exemption application is not complete, the Executive Officer will notify the applicant and specify the documentation needed to complete the application.
- (3) Within 90 days after an application is complete, the Executive Officer will determine whether an exemption from the requirements of this Article will be permitted and, if an exemption is granted, the conditions of approval of the exemption. The applicant and the Executive Officer may mutually agree to a longer time period for reaching a decision. During the review period, the Executive Officer may request, and the applicant shall provide, such additional information that is reasonably necessary to the decision. The applicant may also on his or her own initiative submit additional supporting documentation before a decision has been reached. The Executive Officer must notify the applicant of the decision in writing and specify such terms and conditions.
- (c) Conditions: In granting an exemption, the Executive Officer may include any reasonable measures as conditions of approval, including but not limited to a requirement that best management practices be followed or that the applicant implement the mitigation plan submitted by the applicant or mitigation measures identified by the Executive Officer.
- (d) Cancellation or Modification of Exemption: If the Executive Officer determines that an exemption no longer meets the criteria specified in sections (a)(1)(A) or (a)(1)(B), the Executive Officer may modify or revoke the exemption as necessary to assure that the exemption continues to meet the criteria. The Executive Officer may also revoke an exemption if the holder of the exemption has failed to implement all conditions of approval. The Executive Office must not modify or revoke an exemption without first affording the applicant an opportunity for an appeal to determine if the exemption should be modified or revoked.